

**REMARKS**

This Amendment is being filed in response to the Final Office Action mailed on November 12, 2008, which has been reviewed and carefully considered. Reconsideration and allowance of the present application in view of the amendments made above and the remarks to follow are respectfully requested.

Claims 1-10 are pending in the Application.

In the Final Office Action, claims 1, 2, 4-7, 9 and 10 are rejected under 35 U.S.C. §103(a) as allegedly unpatentable over U.S. Patent No. 5,732,062 ("Yokoi") in view of non-patent Literature ("Sony/Philips"). Further, claim 8 is rejected under 35 U.S.C. §103(a) as allegedly unpatentable over Yokoi in view of Sony/Philips and further in view of U.S. Patent No. 6,515,949 ("Masaki"). The rejection of claims 1-2 and 4-10 is respectfully traversed. It is respectfully submitted that claims 1-2 and 4-10 are allowable over Yokoi in view of Sony/Philips alone and in view of Masaki for the following reasons.

For instance, claim 1 is not obvious over the combination of Yokoi in view of Sony/Philips because the combination Yokoi and Sony/Philips does not disclose or suggest a method that amongst other patentable elements, comprises (illustrative emphasis added) "wherein an even mark having a time length of  $nT$  is written by a sequence of  $n/2$  pulses, where  $n$  denotes an integer value equal to 4, 6, 8, or 10 and  $T$  denotes a length of one period of a reference clock ... wherein a last pulse in the sequence of pulses for writing an odd mark has a period  $\Delta 1p$  longer than a last pulse in the sequence

of pulses for writing an even mark, wherein a gap preceding the last pulse in the sequence of pulses for writing an odd mark has a period  $\Delta 1g$  longer than a gap preceding the last pulse in the sequence of pulses for writing an even mark, wherein the periods  $\Delta 1g$  and  $\Delta 1p$  have an unequal duration not equal to  $T$ " as recited in claim 1, and as similarly claimed in independent claims 7 and 8.

The Final Office Action while acknowledging that each of Yokoi and Sony/Philips is deficient in teaching portions of the claims, attempts to piece together the claim recitations by picking and choosing amongst Yokoi and Sony/Philips, yet in the motivation for combination, the Final Office Action merely cites that "it would have been obvious to a person of ordinary skilled in the art to have modified the method of recording marks on an information layer with a reference clock as taught by Sony/Philips by including an information layer which changes phases when recorded as taught by Yokoi. The suggestion/motivation would have been in order to perform reproduction of the disc information by using the reproduction signal reflected from the phase-change medium (Yokoi, column 34, lines 27-31)." (See, Final Office Action, page 4, first full paragraph.)

This position is respectfully traversed. The desire to perform reproduction of disk information using the reproduction signal reflected from a phase-change medium is not a motivation to substitute different parts of one reference with different parts of another reference.

In rejecting claims under 35 U.S.C. § 103, the Examiner bears the initial burden of establishing a prima facie case of obviousness. In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1442, 1444 (Fed. Cir. 1992). See also In re Piasecki, 745 F.2d 1468, 1472, 223 USPQ 785, 788

(Fed. Cir. 1984). The Examiner can satisfy this burden by showing that some objective teaching in the prior art or knowledge generally available to one of ordinary skill in the art suggests the claimed subject matter. In re Fine, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988).

When determining obviousness, "[t]he factual inquiry whether to combine references must be thorough and searching." In re Lee, 277 F.3d 1338, 1343, 61 USPQ 1430, 1433 (Fed. Cir. 2002), citing McGinley v. Franklin Sports, Inc., 262 F.3d 1339, 1351-52, 60 USPQ2d 1001, 1008 (Fed. Cir. 2001). "It must be based on objective evidence of record." Id. "Broad conclusory statements regarding the teaching of multiple references, standing alone, are not 'evidence.'" In re Dembiczak, 175 F.3d 994, 999, 50 USPQ2d 1614, 1617. "Mere denials and conclusory statements, however, are not sufficient to establish a genuine issue of material fact." Dembiczak, 175 F.3d at 1000, 50 USPQ2d at 1617, citing McElmurry v. Ark. Power & Light Co., 995 F.2d 1576, 1578, 27 USPQ2d 1129, 1131 (Fed. Cir. 1993).

It is respectfully submitted that one may not utilize the teachings of the present application as a road map to pick and choose amongst prior art references for the purposes of attempting to arrive at the presently disclosed invention. The Federal Circuit has identified three possible sources for motivation to combine references including the nature of the problem to be solved, the teachings of the prior art, and the knowledge of persons of ordinary skill in the art. (See, In re Rouffet, U. S. Court of Appeals Federal Circuit, U.S.P.Q. 2d, 1453, 1458.) There must be a specific principle that would motivate a skilled artisan, with no knowledge of the present invention, to combine the prior art as suggested in the Final Office Action. The use of hindsight in the selection of references is

forbidden in comprising the case of obviousness. Lacking a motivation to combine references, a proper case of obviousness is not shown (see, *In re Rouffet*, 1458).

The U.S. Court of Appeals for the Federal Circuit (the "Federal Circuit") restated the legal test applicable to rejections under 35 U.S.C. § 103(a) in the *In re Rouffet*, holding. The Court stated:

[V]irtually all [inventions] are combinations of old elements. Therefore an Examiner may often find every element of a claimed invention in the prior art. Furthermore, rejecting patents solely by finding prior art corollaries for the claimed elements would permit an Examiner to use the claimed invention itself as a blueprint for piecing together elements in the prior art to defeat the patentability of the claimed invention. Such an approach would be "an illogical and inappropriate process by which to determine patentability." To prevent the use of hind sight based on the invention to defeat patentability of the invention, this court requires the Examiner to show a motivation to combine the references that create the case of obviousness. The Board [of Appeals] did not, however, explain what specific understanding or technological principle within the knowledge of one of ordinary skill in the art would have suggested the combination. ... To counter this potential weakness in the obviousness construct the suggestion to combine requirements stands as a critical safeguard against hindsight analysis and rote application of the legal test for obviousness.

*In re Rouffet*, 47 USPQ2d 1457-58 (Fed. Cir., July 15, 1998) (citations omitted, emphasis added).

More recently, the Federal Circuit again dealt with what is required to show a motivation to combine references under 35 U.S.C. § 103(a). In this case the court reversed the decision of the Board of appeals stating:

[R]ather than pointing to specific information in Holiday or Shapiro that suggest the combination..., the Board instead described in detail the similarities between the Holiday and Shapiro references and the claimed invention, noting that one reference or the other-in combination with each other... described all of the limitations of the pending claims. Nowhere does the Board particularly identify any suggestion, teaching, or motivation to combine the ... references, nor does the Board make specific-or even inferential-findings concerning the identification of the relevant art, the level of ordinary skill in the art, the nature of the problem to be solved, or any factual findings that might serve to support a

proper obviousness analysis.

*In re Dembiczak*, 50 USPQ2d 1614, 1618 (Fed. Cir., April 28, 1999) (citations omitted).

Thus, from both *In re Rouffet* and *In re Dembiczak* it is clear that the Federal Circuit requires a specific identification of a suggestion, motivation, or teaching why one of ordinary skill in the art would have been motivated to select the references and combine them.

The Examiner's reasoning for the motivation, namely, that those skilled in the art would have been motivated to combine Yokoi with Sony/Philips in the way suggested by the Final Office Action, could only have been made with hindsight based on the teachings of the present disclosure. The Examiner's reasoning for the motivation for combining the references is nowhere recognized in the prior art nor does the Examiner attempt to make any showing that the art recognized such problems or even that in recognizing a desirable outcome, that the combination would be selectively combined as suggested.

Where a feature is not shown or suggested in the prior art references themselves, the Federal Circuit has held that the skill in the art will rarely suffice to show the missing feature. Al-Site Corp. v. VSI International Inc., 174 F.3d 1308, 50 USPQ2d 1161 (Fed. Cir. 1999) (Rarely, however, will the skill in the art component operate to supply missing knowledge or prior art to reach an obviousness judgment).

Thus, Applicants again respectfully submit that the Examiner has used impermissible hindsight to reject claims 1-2 and 4-10 under 35 U.S.C. § 103(a). As discussed above, the Federal Circuit in *In re Rouffet* stated that virtually all inventions are combinations of old elements.

Therefore an Examiner may often find every element of a claimed invention in the prior art. To prevent the use of hindsight based on the invention to defeat patentability of the invention, the Examiner is required to show a motivation to combine the references that create the case of obviousness. Applicants respectfully submit that the Examiner has not met this burden.

The mere fact that the prior art device could be modified so as to produce the claimed device, which in this case even in combination it does not (as discussed herein), is not a basis for an obviousness rejection unless the prior art suggested the desirability of the modification. See, *In re Gordon*, 733 F.2d 900, 902 (Fed. Cir. 1984); and *In re Laskowski*, 871 F.2d 115, 117 (Fed. Cir. 1989).

The only suggestion that can be found anywhere for making these selective combinations of the prior appears to come from the present patent application itself.

How can the Final Office Action espouse that this reconstruction forwarded does not include knowledge gleaned only from the Applicants disclosure? If this reconstruction did not come from the present application, where did it come from? The above reconstruction certainly did not come from the prior art. Even the Final Office Action does not point to any portions of the prior art for teaching the particular, selective reconstructions/modification as pointed out above.

In consideration of the use of improper hindsight for rendering a claim obvious in light of prior art, the Federal Circuit has stated that "to draw on hindsight knowledge of the patented invention, when the prior art does not contain or suggest that knowledge, is to use the invention as a template for its own reconstruction - an illogical and inappropriate process by which to determine

patentability." (*Sensonic, Inc. v. Aerosonic Corp.*, 81 F.3d 1566, 38 USPQ2d 1551 (Fed. Cir. 1996). "To imbue one of ordinary skill in the art with knowledge of the invention ensued, when no prior art reference or references of record convey or suggest that knowledge, is to fall victim to the insidious effect of a hindsight syndrome wherein that which only the inventor taught is used against its teacher." (*In re Zurko*, 111 F.3d 887, 42 USPQ2d 1476 (Fed. Cir. 1997). "A critical step in analyzing the patentability of claims pursuant to section 103(a) is casting the mind back to the time of invention, to consider the thinking of one of ordinary skill in the art, guided only by the prior art references and the then-accepted wisdom in the field (cited reference omitted). Close adherence to this methodology is especially important in cases where the very ease with which the invention can be understood may prompt one 'to fall victim to the insidious effect of a hindsight syndrome wherein that which only the invention taught is used against its teacher (cited references omitted).'" (*In re Kotzab*, 208 F.3d 1352, 54 USPQ2d 1308 (Fed. Cir. 2000).

Applicants would like to bring to the Examiner's attention well established case law that clearly shows that the court frowns on such use of hindsight, examples of such cases being as follows:

It is stated in *In re Sernaker*, 217 U.S.P.Q. 1, 6 (C.A.F.C. 1983): "prior art references in combination do not make an invention obvious unless something in the prior art references would suggest the advantage to be derived from combining their teachings."

It is clear that the suggestion to combine references should not come from Applicants, as was forcefully stated in *Orthopedic Equipment Co. v United States*, 217 U.S.P.Q. 193, 199 (C.A.F.C.

1983): "It is wrong to use the patent in suit [here the application] as a guide through the maze of prior art references, combining the right references in the right way to achieve the result of the claims in suit [here the claims pending]. Monday morning quarterbacking is quite improper when resolving the question of nonobviousness in a court of law [here the PTO]."

Also, the case law is clear in guarding against the use of hindsight in reading Applicants invention into the prior art, which art is clearly not disclosing the Applicants invention as claimed. Applicants would like to bring the following cases to the Examiner's attention:

The Supreme Court in *Calmar, Inc. v. Cook Chemical Co.*, 383 U.S. 1, 86 S.Ct. 684, 15 L.Ed.2d 545 (1966), in which the Court warns the dangers of "slipping into hindsight", citing the case of *Monroe Auto Equipment Co. v. Heckethorn Mfg. & Supply Co.*, 332 F.2d 406, 141 U.S.P.Q. 549 (6th Cir., 1964), where the doctrine is stated (emphasis provided):

We now come to the patented device which after all is the subject matter of this case. At the outset we take note of two well-established principles. The first is that in considering the questions of obviousness, we must view the prior art from the point in time prior to when the patented device was made. Many things may seem obvious after they have been made and for this reason courts should guard against slipping into use of hindsight. We must be careful to "view the prior art without reading into that art the teachings of appellant's invention." Application of *Sporck*, 301 F.2d 686, 689 (C.C.P.A).

The courts have long held that there must be some teaching in the references cited to suggest the combination of the references in a manner to obtain the combination of elements of the rejected claim(s). It is well known that in order for any prior art references themselves to be validly combined for use in a prior-art § 103 rejection, the references themselves, or some other prior art, must suggest that they be combined. For example:



The Board has stated in *Ex parte Levengood*, 28 USPQ 2d 1300 (PTOBA&I 1993):

In order to establish prima facie case of obviousness, it is necessary for the examiner to present evidence, preferably in the form of some teaching, suggestion, incentive or inference in the applied prior art, or in the form of generally available knowledge, that one having ordinary skill in the art would have been led to combine the relevant teachings of the applied references in the proposed manner to arrive at the claimed invention. ... That which is within the capabilities of one skilled in the art is not synonymous with obviousness ... That one can reconstruct and/or explain the theoretical mechanism of an invention by means of logic and sound scientific reasoning does not afford the basis for an obviousness conclusion unless that logic and reasoning also supplies sufficient impetus to have led one of ordinary skill in the art to combine the teachings of the references to make the claimed invention ... Our reviewing courts have often advised the Patent and Trademark Office that it can satisfy the burden establishing a prima facie case of obviousness only by showing some objective teaching in either the prior art, or knowledge generally available to one of ordinary skill in the art, that 'would lead' that individual 'to combine the relevant teachings of the references which describe various aspects of a patent applicant's invention without also providing evidence of a motivating force which would impel one skilled in the art to do what the patent applicant has done.

As was further stated in *Uniroyal, Inc. v Rudkin-Wiley Corp.*, 5 U.S.P.Q.2d 1434 (C.A.F.C. 1988), "where prior art references require selective combination by the court to render obvious a subsequent invention, there must be some reason for the combination other than hindsight gleaned from the invention itself .... Something in the prior art must suggest the desirability and thus the obviousness of making the combination."

The Applicants respectfully maintain that there is no suggestions in the prior art references to make the combinations in the manner proposed by the Examiner to achieve the Applicants' claimed invention.

The Examiner is requested to consider MPEP §2143 III, wherein it is stated: "The mere fact that references can be combined or modified does not render the resultant combination obvious unless \*\*>the results would have been predictable to one of ordinary skill in the art. KSR International Co. v. Teleflex Inc., 550 U.S. \_\_\_, \_\_\_, 82 USPQ2d 1385, 1396 (2007)"

The U.S. Supreme Court in KSR International Co. v. Teleflex Inc. 550 U.S. (2007), affirmed the legal principle that the mere fact that each element of a claimed invention could be found within the prior art does not render the claimed invention obvious. The court stated: "A patent composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art. KSR International Co. 550 U.S. at p. 14."

In fact, the court in KSR explains "... it can be important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the newly claimed invention does." Id. at p. 15.

Applicant respectfully submit that the facts of the case and the relevant case law indicate that the invention would not have been obvious to one of ordinary skill in the art at the time the application was filed because the underlying facts show that the criteria for a prima facie rejection have not been met. It is respectfully submitted that there is no suggestion within the references, nor would it have been obvious to a person of ordinary skill in the art to combine the references as suggested in the Final Office Action, without the teachings of the Present Application.

Further, it is respectfully submitted that even in combination Yokoi in view of Sony/Philips does not disclose or suggest the inventive features of claims 1-2 and 4-10.

As stated above, even in combination, Yokoi in view of Sony/Philips does not disclose or suggest "wherein a last pulse in the sequence of pulses for writing an odd mark has a period  $\Delta 1p$  longer than a last pulse in the sequence of pulses for writing an even mark, wherein a gap preceding the last pulse in the sequence of pulses for writing an odd mark has a period  $\Delta 1g$  longer than a gap preceding the last pulse in the sequence of pulses for writing an even mark, wherein the periods  $\Delta 1g$  and  $\Delta 1p$  have an unequal duration not equal to  $T$ " as recited in claim 1, and as similarly claimed in independent claims 7 and 8. Masaki is cited for allegedly showing features of a dependent claim and as such, does not cure the noted deficiencies of Yokoi in view of Sony/Philips.

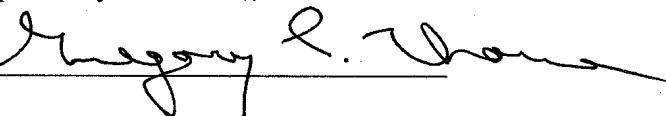
Based on the foregoing, the Applicants respectfully submit that independent claims 1, 7 and 8 are patentable over Yokoi in view of Sony/Philips along, and in view of Masaki, and notice to this effect is earnestly solicited. Claims 2, 4-6, and 9-10 respectively depend from one of claims 1 and 8 and accordingly are allowable for at least this reason as well as for the separately patentable elements contained in each of the claims. Accordingly, separate consideration of each of the dependent claims is respectfully requested.

In addition, Applicants deny any statement, position or averment of the Examiner that is not specifically addressed by the foregoing argument and response. Any rejections and/or points of argument not addressed would appear to be moot in view of the presented remarks. However, the Applicants reserve the right to submit further arguments in support of the above stated position, should that become necessary. No arguments are waived and none of the Examiner's statements are conceded. Moreover, Applicants do not concede that any of the cited references, and in particular,

Sony/Philips, are prior art references against the present application. It is respectfully submitted that the claims are amended merely in the interest of furthering the prosecution and expediting consideration and allowance of the present application.

Applicants have made a diligent and sincere effort to place this application in condition for immediate allowance and notice to this effect is earnestly solicited.

Respectfully submitted,

By 

Gregory L. Thorne, Reg. 39,398  
Attorney for Applicant(s)  
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**THORNE & HALAJIAN, LLP**  
Applied Technology Center  
111 West Main Street  
Bay Shore, NY 11706  
Tel: (631) 665-5139  
Fax: (631) 665-5101